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This is a literal translation of a German document, to which no further information has been added.

GERMAN TITLE:-

"MERKBLATT über Absonderungsmahsnahmen und Behandlung von Dauerausscheidern und Keimträgern bei den wichtigsten austeckenden Krankheiten im Kriege".

("INSTRUCTIONS CONCERNING QUARANTINE MEASURES, ISOLATION AND TREATMENT OF CARRIERS IN THE MOST IMPORTANT INFECTIOUS DISEASES". Under war time conditions.)

May 1944

SOURCE:-

Publication of Abteilung IV c (Medical Section) WEHRKREIS XVIII.

1. The execution of certain medical and sanitary requirements in the field depends upon the tactical situation. In closest collaboration with the troop officers, hygienic and tactical necessities have to be weighed against each other and should determine our action. It occurs quite often that necessary hygienic measures are required to be omitted in the interest of military leadership or because of an unchangeable tactical situation. The following instructions are binding and obligatory for the Wehrmacht at home. In the field, however, --especially if local conditions do not permit the proper application of these rules, we must act in accordance with them as much as possible, and common sense must be applied.

THE EXTENSION OF ISOLATION

2. At the appearance of an infectious disease in the unit the responsible medical officer must apply quarantine measures immediately. The scope and extent of these measures depends on the type of disease. In all parts of the Wehrmacht these isolation measures should be applied equally as far as the duration and the affected personnel are concerned. Generally these measures are overdone and the availability and training of the soldiers is too seriously interefered with. On the other hand, a too lenient attitude toward the enforcement of quarantine measures can easily lead to complete failure. The quarantine measures are applicable to the following groups:

3. Infected persons (those that are actually diseased) belong in a hospital where an isolation ward is available or in a special hospital for infectious diseases only. If certain dispensary wards (Truppenreviere) have isolation facilities, they are equivalent to isolation hospitals.

Individuals with angina (tonsillitis, septic sore throat)--also under field conditions--should not be mixed with other non-infectious cases or wounded. They must be isolated. Since diphtheria often takes an atypical course resembling angina, especially in adults, and since undiagnosed cases represent one of the most common sources of diphtheria infections, every case of angina should have a throat and nose culture. Special measures must be taken in cases of plague and small pox or if one suspects that these conditions might exist. These special quarantine measures can be learned from the appropriate rules for medical officers prepared by the Wehrkreise.

4. Suspects are those persons who show symptoms of an infectious disease, but in whom the diagnosis cannot be made with certainty. It is desirable that these be separated from their units, but it cannot always be done under war conditions. For rules governing the more important infectious diseases, see paragraphs 14 to 60.

5. Persons suspected of having been infected (contacts) are healthy individuals, who have lived in close contact with the diseased person, e.g., in quarters and in ranks, and include all soldiers who could have been infected according to the investigations for the source of the infection and the spread of the infectious material. These individuals remain with their unit and are submitted to a strict medical supervision with daily temperature checks. They do regular duty but should be kept separated as much as possible from the rest of the troops, especially as far as quarters and free time are concerned. Severe physical strain should be avoided.

6. Persons harboring the causative organisms for more than ten weeks after passing through the active stage of the disease are potential sources of infection and can spread the disease (convalescent carriers). They must be placed into the same category as infected acute cases and must be submitted to the same isolation measures.

7. Healthy carriers are those persons who harbor certain organisms and sometimes temporarily excrete them without having been actually sick. In the spread of many infectious diseases (cholera, diphtheria, grippe, epidemic meningitis, poliomyelitis, scarlet fever), healthy carriers are more important that infected persons. In times of epidemics the number of carriers harboring the organisms of the existing disease usually increase considerably. Isolation measures for such a group are a failure because it is technically impossible, or at least extremely difficult to recognize them (e.g., in grippe or poliomyelitis). Those that have been recognized, should be quarantined according to the instructions contained in paragraphs 14 to 60. Especially in diseases where the early recognition of carriers is impossible, strictest medical supervision and the earliest isolation of the sick must be enforced. General hygienic measures and vaccination should counteract a spread of the infection. Healthy carriers should not be transferred into hospitals. It is a task of the unit surgeon to separate the "healthy" carriers from the rest of the unit, to provide for proper quarters, proper occupation during duty hours and free time. Ample light work in fresh air, separation from the rest of the unit, usually leads to a quick disappearance of the organism. To keep carriers or contacts in rooms or quarters is wrong. The employment of carriers in special work for the supply services or in kitchens is strictly forbidden.

DURATION OF QUARANTINE

8. This depends generally on the longest usual incubation period of that particular infectious disease. (Incubation periods, see annex.)

9. At the beginning of an epidemic, nothing final can be said about the duration of the quarantine. The utmost reticence is indicated in each case. In most instances a quarantine "until further disposition is possible" must be declared. The troop commanders should be informed about the probable duration of the incubation period under consideration.

CANCELLATION OF LEAVES

10. General cancelling of leaves should only be enforced in cases of epidemics if it is not yet possible to judge the extent of the epidemic and the exact number of men infected. Before such an order is issued, the medical officer should determine whether it will exert its effect in time, and not at a moment when the danger of further infection has already been eliminated by the application of quarantine measures or the detection of the infectious source.

11. In the home areas only the Wehrkreiskommando or the Marineoberkommando can declare a place "off limits" or enforce a general cancellation of leaves for the purpose of preventing the spread of infectious disease.

LIFTING OF QUARANTINE

12. In contacts, all quarantine and isolation measures should be lifted as soon as suspicion of the existence of infectious disease is proved to be false. Infected individuals will be released after recovery, and when they are no longer infective.

13. If the disease has actually existed, the quarantine can only be lifted after careful terminal disinfection and bacteriological final examination. These final measures can be learned from paragraphs 14 to 60.

ISOLATION AND OTHER MEASURES AGAINST PERMANENT, INTERMITTENT AND CONVALESCENT CARRIERS OF THE MOST IMPORTANT INFECTIOUS DISEASES.

TYHOID AND PARATYPHOID, A & B:

14. Persons suspicious of having the disease must be isolated until the diagnosis of typhoid or paratyphoid can be excluded with certainty.

15. Quarantine of persons who may be infected is not necessary if a careful medical supervision is possible. This includes the examination of three (under field conditions of two) stool and urine specimens, two to three days apart. This serves the purpose of finding healthy carriers in the immediate environment of typhoid and paratyphoid cases. Taking of blood samples for the serological examination of these individuals should be omitted.

16. Slightly ill individuals (ambulant patients) can excrete organisms indefinitely.

17. About three to five per cent of all cases of typhoid or paratyphoid excrete organisms permanently, especially women. Feces and urine may contain the organisms for many months or even years after occurrence of the disease. The excretion of organisms may take place at certain intervals only, so that the convalescent carrier can only be recognized after repeated bacteriological examinations of feces and urine. If possible an examination of bile gained throu the duodenal tube should be done. In cases of known convalescent carriers, these examinations should be carried out every two months.

18. A chronic irritation of the gall bladder is considered the cause for this permanent excretion of the organisms with the feces. It is not always possible, however, to eliminate this condition by extirpating the gall bladder. Vaccination has also proven unsuccessful.

19. Persons excreting the bacilli of paratyphoid A and B infection are rarer than those excreting typhoid organisms. However, cases of cholecystitis paratyphosa are just as dangerous as the corresponding disease with typhoid organisms.

20. If the excretion of organisms has not spontaneously ceased four weeks after the return to normal temperatures, one must apply preventive therapeutic measures in order to prevent a later permanent excretion of organisms. Heat treatment sometimes serves this purpose. Repeated duodenal irrigations with magnesium sulfate solution have been recommended.

If, however, the bacteriological examination shows a continuous presence of organisms and all therapeutic measures have failed, a DU action (Dienstuntauglich--unfit for service) should be initiated. If the soldier leaves the Wehrmacht finally the medical officer concerned must be informed. The continued use of such a man in the Wehrmacht is only possible with the consent of the highest medical authority of the involved Wehrmacht Section, e.g., the Army medical inspector, after consideration of the special military and hygienic circumstances.

21. Healthy carriers (persons that stay healthy with only temporar appearance of typhoid or paratyphoid organisms) from the environment of typhoid or paratyphoid cases are rarer in comparison to the number of convalescent carriers. The organisms pass through the body of these cases without causing any pathogical changes and soon disappear completely.

Measures against healthy carriers in cases of typhoid should not be carried out according to paragraph 7 but should be treated as convalescent carriers who excrete organisms permanently, according to paragraphs 16 to 20. Typhoid carriers can be transferred and admitted into hospitals. Paratyphoid A and B carriers are very rare.

22. The lifting of quarantine or discharge from the hospital after clinical recovery from typhoid or paratyphoid depends on the result of the final bacteriological examination. It is necessary that at least five consecutive urine and stool examinations--made three to five days apart--should prove the absence of typhoid or paratyphoid organisms. The patient should have been afebrile for at least ten days before these examinations are done. Single positive findings necessitate the repetition of the whole bacteriological examination. The collecting of specimens must be done under control, so that no foreign stool or urine is brought in for examination. For treatment and discharge of permanent carriers, see paragraph 20.

23. The isolation wards of the hospital should observe certain precautions from the time of admission of carriers to the final clearing of their classification status in the Wehrmacht.

The carriers will be instructed carefully and will receive a paper containing all precautions they must observe. These must be strictly enforced.

The following important points should be contained in these instructions:

Before each meal and before preparing meals, after each defecation, or urination, the hands should be washed carefully. On the latrine, only toilet paper should be used. In passing urine, make sure the clothing, shoes, or walls are not being soiled. Latrine seats and door handles must be disinfected concurrently after each use of the latrine. Do not urinate or defecate outside of the latrine.

The hospital is responsible for the most pedantic cleanliness of the latrine.

Disinfectant must be kept ready in the latrine. Underwear, bedding and used towels should be collected separately from the hospital laundry and must be boiled. Persons excreting organisms should be kept out of kitchens and food depots.

INFECTIOUS ENTERITIS (BRECHDURCHFALL).

24. Special quarantine measures in explosive mass attacks of diarrhea presenting the clinical picture of gastroenteritis are not indicated. The direct transmission of enteritis organisms from person to person is rare. Only the direct intake of contaminated food leads to actual disease.

Infected persons and healthy and convalescent carriers must be removed from the food supply system or K.P. immediately. If the re-admission of a soldier to those duties cannot be determined by proper laboratory examinations, (under field conditions) he should not be returned to duty until eight days after recovery, or in cases of contacts, eight days after the intake of suspected food. As a rule, the excretion of organisms is terminated after that period. Laboratory tests should be done as soon as the opportunity arises, especially if the person works as a food handler, or is in the food supply chain.

Healthy carriers are found in each type of group disease. Quite often people eat contaminated food and excrete organisms for a short period without actually getting sick.

People who excrete organisms for long periods of time (permanent carriers) are very rare.

Infected persons who are once admitted to a hospital must have a negative bacteriological examination before being discharged just as for paratyphoid cases.

BACILLARY DYSENTERY

25. The number of minor cases, contacts and carriers is so large under ordinary field conditions, that separation from the unit is hardly possible. However, those with diarrhea or other intestinal disturbances, should be immediately relieved of K.P., even in the field, without waiting for the result of a bacteriological examination. Re-admission is only permissible after all signs of the intestinal disturbance have disappeared and, if possible, after a negative laboratory report. The organisms of bacillary dysentery are not very resistent. They die quickly during long transportation It is, therefore, of no avail to submit a stool specimen if quick transportation to the laboratory is not possible.

26. Persons who excrete the organisms for long periods are generally very rare and in those cases one deals usually with E type dysentery organisms. These persons ordinarily suffer from a chronic type of the disease.

27. To prevent transmission of bacillary dysentery, all soldiers of the unit should immediately use special latrines as soon as symptoms of diarrhea appear. The stools have to be disinfected concurrently in the latrine by covering them with lime, sand or earth. Flies are common transmitters of dysentery organisms, and all measures for fly control should be observed carefully.

28. Quarantine measures are lifted only after negative results from a final bacteriological examination.

Under field conditions, two, otherwise three, stool examinations--three days apart--should be done. This is not absolutely necessary in times of epidemics under field conditions.

AMEBIC DYSENTERY

29. Twenty to twenty-five per cent of all soldiers in the hotter climates become carriers of amebic cysts, but even people who never left the temperate zones show amebic cysts quite often; in certain parts of Germany they may be found in more than ten per cent of persons examined.

30. In warm countries these persons represent a danger to themselves and to those around them. They can always develop an acute amebic dysentery with all its complications, such as, amebic hepatitis, and amebic liver abscess, and the excreted cysts can be transmitted by flies. Deposited on food stuff, they can cause the infection of other people.

31. Soldiers returning from countries where amebic dysentery is prevalent should be examined for amebic cysts, especially if they complain of indefinite symptoms referable to the intestinal tract. (Diarrhea with or without blood or mucus, tenderness of the liver region, tenderness over McBurney's point, over the lienal flexure, or along the course of the descending colon and sigmoid.) The examination for amebic cysts requires great practical and special experience. It should be performed in the hospitals for tropical diseases in the different Wehrkreise, Luftgaue or Marineoberkommandos, etc. If possible, the patient should not be admitted to the hospital ward. This examination does not have the purpose of finding persons who excrete cysts but to treat those that suffer from a chronic amebic dysentery.

Carriers without actual symptoms of the disease do not need any treatment in the temperate zones. They can be on a full duty status without limitation.

32. If the previously mentioned examinations reveal persons who suffer from a chronic form of the disease, it is advisable to treat them only in isolation hospitals or hospitals for tropical diseases. Here there are medical officers, who have a sufficient amount of experience in diagnosing and treating those cases. The examination of stool specimens brought over wide distances is of no value.

33. The best preventive methods against amebic dysentery in countries where the disease is prevalent consists in building fly proof latrines or fly proof burial of the feces and kitchen waste and a proper fly control program. Strict laws are necessary as far as water and food supplies are concerned..

In temperate zones all these preventive measures against amebic dysentery are unnecessary, since all the climatic and other factors which are necessary--besides the causative organisms--are absent.

CHOLERA

34. For the spread of cholera healthy carriers are of the utmost importance. At the start of a cholera epidemic, careful examination of the environment must be carried out in order to detect the presence of carriers. It is sufficient to submit the mixed stools of ten persons. Only if this mixture contains cholera organisms, are single individual examinations necessary for the detection of the carrier. Extremely suspicious are those persons who suffer from temporary attacks of diarrhea of short duration, and whose stools regularly contain large numbers of cholera vibrios. Large amounts of alcohol and sudden changes in the person's food intake can change a healthy carrier into an individual affected with the disease. Extremely unfavorable climatic conditions can have similar results. For the transmission of cholera, small traces of excreta, which contain large numbers of cholera vibrios, are sufficient. These stay alive in the excreta for about thirty days. The carriers often excrete the vibrios in the same amount and just as long as persons in whom the disease is actually manifest. They must be hospitalized and strictly isolated from the rest of the unit.

35. In convalescent carriers, the excretion of the organisms usually lasts several days or weeks, generally, however, not longer than eight weeks. Only in rare cases convalescent carriers excrete the organism permanently or excrete the vibrios for several months up to a half year after recovering from the disease. They then present a serious source of infection. They should be treated and isolated in the same fashion as acute cholera cases.

36. The lifting of isolation in cases of cholera or cholera carriers depends on the result of a final bacteriological examination. Three different stool specimens, taken one day apart, must show the absence of cholera vibrios. The taking of the specimens must be strictly supervised.

TYPHUS FEVER, FLECKFIEBER

37. The most important sanitary measures at the start of typhus are the delousing and immediate separation of those actually diseased and those suspicious of having the disease, and the delousing and careful supervision, without isolation, of those suspicious of having been infected. Carriers and persons who permanently excrete the organisms are not known.

38. Infected persons and suspects should undergo a careful delousing of body and clothing and after disinfection be isolated in hospitals. All persons with symptoms of disease who have been in contact with typhus cases must be considered as suspicious and every case with fever of undetermined origin belongs into the same group.

39. The blood of persons with typhus fever is still infectious eight days after the temperature returns to normal and lice can be infected up to that time. In a louse-free environment, the completely deloused, cleaned and disinfested case cannot spread the disease. The duration of isolation for the actual case is eight days after the temperature returns to normal, for the suspect until the diagnosis can be excluded with certainty. All persons without symptoms who have been in contact with acute cases and were not deloused or reliably deloused, or in contact with persons suspected of having the disease must be considered as suspicious cases; especially as long as the incubation period has not expired. They should be closely supervised for three weeks. This period is not prolonged if new cases appear amongst the supervised and deloused group, provided the infection had occurred befor

the delousing, and that the applied delousing measures were effective. Otherwise the close supervision must be extended by another three weeks from the outbreak of a new disease.

40. Quarantine measures in PW camps should be applied in a similar fashion.

DIPHTHERIA

41. Persons with diphtheria are to be isolated and kept strictly separated, especially from the wounded. In times of epidemics, carriers found during the bacteriological examination of people with angina (tonsillitis, septic sore throat) are important sources for the dissemination of diphtheria. The number of carriers amongst the population is considerable, usually up to two per cent. In times of epidemics as high as fifty per cent of the examined may be carriers, especially in the environment of diphtheria. The number of carriers in a unit can give a picture of the degree of the spread but not of the real danger within that unit. In times of epidemics we constantly find fresh carriers of diphtheria organisms. Bacteriological examinations of a unit for the purpose of finding the number of carriers, once acute diphtheria cases appear, should not be done. A transfer of healthy carriers from the unit into a hospital is strictly forbidden. Once it has been found that a man is a carrier, the man has to be strictly medically supervised and he should be employed, separated from the rest of the unit, in sufficient fresh air on a light duty status. If possible, the carrier should not be in quarters with the healthy personnel. If that cannot be done, sufficient space should be provided for between the healthy personnel and the carriers. Instead of separating contacts, the group must be supervised carefully. If many cases arise within the same unit, special measures can be applied after previous consultation with the consulting hygienist or physician.

42. Convalescent carriers can disseminate the organism for a longer period of time after recovering from the disease. They are considered convalescent carriers if they harbor the organism for more than eight weeks after the onset of the disease in the upper respiratory tract. The isolation, however, should be lifted six weeks after clinical recovery even if nose and throat cultures still show the presence of diphtheria bacilli. A limited isolation can be done from the fourth to sixth week in proper quarters of the unit. Under proper medical supervision, these soldiers can perform duty. Only after this time, should convalescent furloughs be given. The enforcing of isolation measures just as well as the lifting of isolation (discharge from the hospital) should not depend on the result of a bacteriological examination.

The constant presence of diphtheria organisms in the nose or throat is often combined with pathological conditions in the upper respiratory tract. In treating diphtheria carriers, it is, therefore, of the utmost importance to remove severe pathological changes in the upper respiratory tract and the sinuses. These carriers should be examined and treated by a specialist for ear, nose and throat diseases. X-ray treatments are strictly forbidden. Convalescent carriers lose the organism best and fast by staying in fresh air most of the time. They should be employed in an extensive way in fresh air. Reinfection from fresh cases should be prevented by a gradual re-admission of the carrier to his unit. This can be done in the following way: Two completely separated isolation quarters are provided for the carriers; first all carriers are being put into the first isolation. From then on, each one that has a negative culture is placed in the second

isolation quarters where he remains until three further smears are negative. He is then re-admitted to his former unit quarters.

43. Convalescent cases may be removed from isolation or discharged from the infectious ward only if three cultures from the nose and throat reveal negative bacteriological findings. These should be done two days apart. If all measures mentioned in paragraph 42 are observed, the isolation of convalescent carriers can be lifted six weeks after clinical recovery, however.

44. Nursing personnel on typhus wards should be examined carefully for diphtheria bacilli since the combination of typhus with diphtheria is usually fatal.

SCARLET FEVER

45. Carriers of hemolytic streptococci, the presence of which is one of the conditions for the disease, are found everywhere and at any time in changing numbers. The number varies between two and ninety-six per cent of those examined. It is greatly increased during times of epidemics. An abortive course of the disease usually remains unrecognized. Hemolytic streptococci have an extreme resistence against outer influences and their infectibility varies and depends on local and time conditions. Examination of the environment for hemolytic streptococci in nose or throat and the treatment or isolation of streptococcus carriers must be omitted. Instead of isolating contacts, a strict medical supervision of this group should be observed.

46. Scarlet fever cases should be isolated and strictly separated from wounded.

47. Suspects should be quarantined for twenty-one days. In times of epidemics, patients with unspecified angina should be suspected of having the disease.

48. The isolation of the diseased has to be carried out generally for about six weeks after clinical recovery. Clinically healthy convalescents should be discharged, at that time even if a throat smear still shows the presence of hemolytic streptococci. Those with complications such as a discharging otitis media should be kept in the infectious wards, and, if the indication for surgery arises, should be operated upon there. If inflammatory or discharging complications exist, it is inadvisable to discharge the cases, even if the disease as such has disappeared for weeks. If the inflammatory symptoms disappear or the discharge becomes very scant, we can assume that the patient is no longer infectious and does not need further isolation.

49. In hospitals with infectious wards, only nursing personnel which either has had scarlet fever or has been actively immunized against the disease should be used in the care of these cases. Diphtheria carriers should not be used for this purpose.

SPINAL MENINGITIS--MENINGITIS EPIDEMICA

50. Persons with meningitis are isolated and strictly separated from the wounded. Healthy carriers will be found regularly during careful mass examinations everywhere and at any time. Under norma conditions the number amounts to two to five per cent, but sometimes as many as fifty per cent have been found even without the existence of endemic or epidemic conditions. Certain individuals carry the organisms for years. Isolation of all carriers is impossible.

51. Smears of the nasopharynx for the purpose of detecting carriers are impractical, especially since the meningococcus dies rapidly when exposed to temperatures below 37 degrees C. Other measures such as gargling or painting of the mucous membranes of the nasopharynx with chemical solutions only disturb the natural resistence and should be omitted. "Preventive" serum treatment must be omitted also.

52. Increased numbers of meningitis cases within the same command or unit may sometimes require special measures in accordance with the advice of the consulting hygienist. (Quarantine of the unit or camp, more generous spacing in quarters, prevention of crowding in dayrooms, disinfection of rooms, washing under running water, prevention of exposure.)

POLIOMYELITIS

53. The sick are isolated for six weeks. Strictest disinfection of sputum, urine and feces is necessary. Submission of sputum, urine or feces for bacteriological examination should be omitted.

54. In single poliomyelitis cases the sick and the suspects are isolated in hospitals.

55. If numerous cases appear in one unit, severe physical strain and exposure of the troops should be prevented, and they should be under strict medical supervision for twelve days. Proper spacing in quarters should be arranged. Sufficient fresh air and separation from the rest of the troops is recommended. All doubtful febrile diseases must be considered as suspicious. They should not be isolated but watched carefully for the appearance of suspicious symptoms.

56. Carriers are clinically healthy individuals who harbor the virus without actually getting the disease. For the transmission of the disease they are important. Because it is impossible to prove the presence of the virus, carriers as such cannot be recognized and measures against them are, therefore, impossible. As a preventive measure at the appearance of single cases, crowding in closed rooms (theaters, movies, schools) should be forbidden.

MALARIA

57. As carriers in malaria, only those individuals are of importance who carry the gametocytes, i.e., the sexual stages of the plasmodiae. They are only dangerous for the environment in countries where mosquitoes (certain anopheles) are present and in which the climate, (heat and humidity) is favorable for the development of the plasmodium in the mosquito. Chronically sick people and those in whom the infection did not manifest itself in a typical fashion can be carriers of gametocytes.

Carriers representing sources of infection for the mosquitoes are found primarily amongst the natives but also amongst PWs and our own troops who had been in action in malaria zones. In tropical zones a specific treatment of carriers amongst the natives can be successfully performed by giving all persons, disregarding age and sex and without a previous examination, one tablet of 0.01 g plasmochin during the time of danger from tropical malaria. These tablets must be given under close supervision. This dosage is sufficient to make the gametocytes of the tropical variety (Plasmodium falciparum) harmless for the further infection of mosquitoes. The gametocytes, however, remain in the blood stream and can be seen through the microscope.

Tertiana (Plasmodium vivax). Plasmochin prophylaxis is not absolutely effective against this infection. Against this type only periodic mass treatments of the whole population are effective. With considerably greater means the success is a considerably smaller one than the prophylaxis against the gametocytes of the tropical form.

58. A differentiation between carriers and chronically sick in cases of malaria is not possible. The chronically sick are always temporarily carriers of gametocytes and even the primarily healthy carriers can show an acute manifestation of the disease at any time. Acute attacks of fever should be treated according to the rules of malaria treatment, with the atabrine plasmochin combination, which is the same, whether we are dealing with a relapse or the primary disease. Preventive safety cures against recurrences during the time of clinical latence is without any purpose. Provocations for the creation of clinical attacks disturb the natural healing process and are strictly forbidden in the Wehrmacht.

59. Malaria cannot be transmitted from man to man and isolation of malaria cases from other sick is not necessary. Malaria cases do not belong into isolation wards but can be quartered together with any other cases. Only in hospitals in malaria infected regions where anopheline mosquitoes are present and where the necessary climatic conditions exist, the diseased individual must be protected against mosquito bites. This can be accomplished by screening the wards properly with window screens, screened doors, mosquito bars, painting the walls with Gix or Gesarol (DDT suspension) during the malaria season (the latter process must be repeated every three weeks).

60. In quarters where malaria infections occurred, a very careful destruction of all mosquitoes must be performed. Sprays of mosquito killing remedies (Flit, Detmolin, etc.) should be used and the rooms should be painted or sprayed with Gix or Gesarol during the malaria season.

SPECIAL MEASURES IN FOOD SUPPLY INSTALLATIONS AND IN TROOP KITCHENS

61. All personnel employed in the food supply chain (bakery companies, butchers, personnel of train kitchens, and personnel of training kitchens of the Wehrkreis or any installation of the Wehrmacht, who deal with the manufacturing and preparation of foodstuff) are to be examined regularly every three months, including bacteriological examinations of stool and urine. If the situation permits and favorable transport possibilities exist, those examinations should also be carried out in the field armies.

62. The employment of soldiers or civilians, especially personnel from foreign countries, in troop kitchens or other installations of the food supply service can only be done, after two previous negative bacteriological examinations of stool and urine. Furthermore, they should be examined for tuberculosis and a very detailed history of each individual taken.

63. If an infectious intestinal disease occurs, the medical officer should carry out another stool and urine examination of all kitchen personnel.

64. If soldiers are detailed for training courses in training kitchens, a bacteriological stool and urine examination should be carried out first, and the training course can only be started after a negative bacteriological result is obtained.

65. In times of epidemics proper steps must be taken to insure that all kitchen personnel observe the utmost care to protect themselves and the unit from the spread of an infectious disease. (Repeated careful washing of hands, especially after using the latrine and before preparation of food, careful washing and boiling of vegetables and food, proper fly control in kitchen, supply rooms, iceboxes, etc.) Uncooked salads should not be included in the daily diet, once intestinal disease occurs.

66. The medical officer of the unit is responsible for the proper application of the named measures. He will keep a roster of all kitchen personnel under his supervision, into which the day, the result and the name of the hygienic institute, that performed the examination, will be entered.

AVERAGE INCUBATION PERIODS

Typhus Abdominalis--typhoid fever	7 to 28 days.
Paratyphoid A	2 to 21 days.
Paratyphoid B	3 to 21 days.
Enteritis	hours to 2 days.
Bacillary Dysentery	3 to 7 days.
Amebic Dysentery	great variations.
Cholera	hours to 4 days.
Typhus Fever	3 to 21 days. (Usually 12 to 14 days.)
Diphtheria	2 to 7 days.
Scarlet Fever	hours to 21 days. (Usually 5 days.)
Spinal Meningitis	hours to 3 days.
Poliomyelitis	3 to 12 days.
Malaria Vivax	10 to 15 days.) or several, usually 8 to 9 months.
Malariae	12 to 20 days.)
Falciparum	5 to 10 days.)
Measles	9 to 11 days.
Plague	1 to 7 days.
Small Pox	10 to 14 days.

For the Chief Surgeon:

William A. Howard

WILLIAM A. HOWARD
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